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TRANSMITTAL LETTER FOR THE TECHNICAL SUMMARY MEMORANDA FOR OPERABLE  
UNIT 4 (OU 4), OPERABLE UNIT 5 (OU 5) AND OPERABLE UNIT 6 (OU 6) NWS EARLE NJ  
10/13/1997  
BROWN AND ROOT ENVIRONMENTAL



## Brown & Root Environmental

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October 13, 1997

Mr. J. Kolicius, Code 1821  
Northern Division  
Naval Facilities Engineering Command  
10 Industrial Highway, Mail Stop No. 82  
Lester, Pennsylvania 19113-2090

Reference: Contract No. N62472-90-D-1298 (CLEAN)  
Contract Task Order (CTO) No 300

Subject: Submission of Technical Summary Memoranda OU-4, OU-5 and OU-6  
NWS Earle - Colts Neck, New Jersey

Dear Mr. Kolicius:

Brown and Root (B&R) Environmental Corporation is pleased to submit the referenced documents. These memoranda present the agreed basis for the NFA PRAP (OU-4) and two FSs (OU-5 and OU-6).

Thank you for this opportunity to submit the subject documents. Do not hesitate to contact me if you have questions or require revisions.

Sincerely,

Russell E. Turner  
Project Manager

RET/ejc

c: Garth Glenn (B&R Environmental)  
File

**TECHNICAL MEMORANDUM  
OPERABLE UNIT 4  
SITES 14, 20, 22, 23, 24, 25, 27, AND 29  
NWS EARLE  
COLTS NECK, NEW JERSEY  
CTO 300**

**I. REMEDIAL INVESTIGATION RESULTS AND PRELIMINARY REMEDIAL ACTIONS**

Remedial investigation results for all sites are contained in the July 1996 Remedial Investigation Report.

**II. REMEDIAL ACTION RESULTS AND RELATED DOCUMENTS**

The following reports have been supplied to B&R Environmental for the referenced Sites:

Site 14 - Mercury Spill

See RI Report

Site 20 - Grit Blasting Area at Building 544

"Interim Remedial Action Report for Site 20" by Greg Goepfert (NWS Earle) February 28, 1995

Site 22 - Paint Chip Disposal Area

"Action Memorandum - Sites 22, 23, and 24 Paint Disposal Areas"

"Close-Out Report - Removal Actions at Sites 22, 23, and 27" by Foster Wheeler Environmental Corporation (February 14, 1997).

Site 23 - Paint Disposal Area

"Action Memorandum - Sites 22, 23, and 24 Paint Disposal Areas"

"Close-Out Report - Removal Actions at Sites 22, 23, and 27 by Foster Wheeler Environmental Corporation (February 14, 1997).

Site 24 - Closed Pistol Range

"Installation Restoration Program - Sites 24 and 25 (Closed Pistol Ranges)" by Greg Goepfert (NWS Earle) March 1997.

"Pistol Range Remediation" by Metcalf & Eddy October 17, 1997.

Site 25 - Closed Pistol Range

"Installation Restoration Program - Sites 24 and 25 (Closed Pistol Ranges)" by Greg Goepfert (NWS Earle) March 1997.

"Pistol Range Remediation" by Metcalf & Eddy October 17, 1997.

#### Site 27 - Projectile Refurbishing Area

"Action Memorandum - Sites 22, 23, and 24 Paint Disposal Areas"

"Close-Out Report - Removal Actions at Sites 22, 23, and 27 by Foster Wheeler Environmental Corporation (February 14, 1997).

#### Site 29 - PCB Spill Site

"Soil Pile Sampling Locations" by Greg Goepfert (NWS Earle) June 2, 1995.

"Report on Environmental Site Evaluation - Proposed Hazardous Waste Storage Facility" by Haley & Aldrich, Inc. (September 1993).

### **III. STATUS FOR PREPARATION OF NO FURTHER ACTION DETERMINATION**

See the attached site status summary.

### **IV. NFA PREPARATION**

There are two possible approaches to obtain no further action (NFA) for the OU-4 sites:

- 1) Prepare a Proposed Plan and Record of Decision for OU-4
- 2) Prepare Consensus Document

B&R Environmental is proceeding with preparation of a Proposed Plan for the OU-4 sites, based on preliminary direction from the Navy. This approach is the normal CERCLA approach to obtaining NFA for sites.

Another option, which has been used recently at other sites, involves preparation of a Consensus Document which is similar to a Record of Decision. The Consensus Document eliminates the Proposed Plan step and associated public comment period and assumes that the regulators and the public are in agreement with the proposed closure of each site. Consensus Documents are relatively new and are not universally accepted as are Proposed Plans and Record of Decisions. Therefore, the Navy would need to receive approval from the USEPA and the NJDEP prior to implementing this strategy.

**SITE STATUS SUMMARY  
OPERABLE UNIT 4  
NWS EARLE  
NFA DETERMINATION**

			RISK EVAL.	NJDEP			NFA
SITE	DESCRIPTION	COCs	YES/NO	CLEANUP	COMMENTS	RA RESULTS	STATUS
14	Mercury Spill	Mercury	No	Yes	Cleanup appears complete	RI Report (B&R E)	Complete
20	Grit Blasting Area at Building 544	Metals and PAHs	Yes	Yes	Cleanup based on future risk	Interim RA Report (NWS Earle)	Complete
22	Paint Chip Disposal Area	VOCs, PAHs, Metals, Pest.	Yes	Yes	RA Completed	RA Report (F W)	Complete
23	Paint Disposal Area	PAHs, Metals	Yes	Yes	RA Completed	RA Report (F W)	Complete
24	Closed Pistol Range	Metals	Yes	Yes	Cleanup appears complete	IRP Report (NWS Earle 3/97)	Complete (1)
25	Closed Pistol Range	Metals	Yes	Yes	Cleanup appears complete	IRP Report (NWS Earle 3/97)	Complete (1)
27	Projectile Refurbishing Area	Metals and Organics	Yes	Yes	RA Completed	RA Report (F W)	Complete
29	PCB Spill Site	PCBs and Iron	Yes	Yes	Risk for Groundwater Only	6/2/95 Notes (NWS Earle)	Complete

Notes:

- 1 Need supporting data (Appendices) for the 3/97 report.

**TECHNICAL MEMORANDUM  
OPERABLE UNIT 5  
SITE 13  
NWS EARLE  
COLTS NECK, NEW JERSEY  
CTO 300**

**I. REMEDIAL INVESTIGATION RESULTS**

The 1995 RI concluded that the groundwater at the site was impacted by volatile organic contaminants (VOCs) but the results did not provide sufficient delineation of the extent of the contamination. An additional remedial investigation was performed to investigate the extent of groundwater contamination and these results were included in the February 1997 RI Addendum Report.

The results of remedial investigations indicate that groundwater in the vicinity of Site 13 has been impacted and represents a threat to human health under future residential and future industrial exposure scenarios, which assume human consumption of shallow groundwater at Site 13. In some areas, landfill contents are exposed at the surface, posing a physical hazard to future workers at the site.

**II. ARARS AND TBCs**

Since there is no current or future plan for use of the groundwater as a potable water source, New Jersey Groundwater Quality Standards should be considered as the ARAR for the groundwater. OSWER Directive 9355.0-62FS entitled "Application of the CERCLA Municipal Landfill Presumptive Remedy for Military Landfills (April 1996) and OSWER Directive 93550.0-49FS entitled "Presumptive Remedy for CERCLA Municipal Landfill Sites" (September 1993) should be considered as TBCs.

**III. REMEDIAL ACTION OBJECTIVES**

The remedial action objectives for Site 13 are summarized as follows:

1. Prevent contact with landfill contents which are exposed in several areas of the site.
2. Control migration of site-related contaminants to groundwater.
3. Control groundwater usage until New Jersey Groundwater Quality Standards are achieved.

**IV. PROPOSED ALTERNATIVES**

Based on the results of remedial investigations and discussions with the Navy, the following alternatives are proposed for Site 13:

Alternative 1 - No Action

Alternative 2 - Limited Action (Institutional Controls)

- Site Security (Fence)
- Long-Term Monitoring (Install additional wells for compliance monitoring)
- CEA

Alternative 3 - Presumptive Remedy for Municipal Landfills.

- Site Security (Fence)
- Installation of a Landfill Cap
- Long-Term Monitoring (Install additional wells for compliance monitoring)
- CEA

Alternative 3 - Presumptive Remedy for Municipal Landfills.

- Site Security (Fence)
- Installation of a Landfill Cap
- Long-Term Monitoring (Install additional wells for compliance monitoring)
- CEA

Alternative 4 - Groundwater Remediation Scenario.

- Review Technologies
- Model Contamination Migration
- Long-Term Monitoring (Install additional wells for compliance monitoring)
- CEA

NOTE: These alternatives are anticipated for Initial screening. Final alternatives may vary.

**TECHNICAL MEMORANDUM**  
**OPERABLE UNIT 6**  
**SITES 3 AND 10**  
**NWS EARLE**  
**COLTS NECK, NEW JERSEY**  
**CTO 300**

**I. REMEDIAL INVESTIGATION RESULTS**

**A. Site 3**

The remedial investigations conducted in 1995 indicated minimal impacts to groundwater (metals) in the vicinity of Site 3. Additional investigations were recommended for the wetlands areas to delineate the extent of contamination.

Several additional sediment samples were collected from the adjacent wetlands to evaluate potential impacts to this area. Shallow soil samples were also collected from Site 3 to ascertain whether runoff from Site 3 was the source of contaminants identified in one wetlands surface soil (sediment) sample. The results of these additional remedial investigations concluded that stormwater runoff was likely the source of contamination in an adjacent drainage ditch, but did not appear to be affecting the adjacent wetlands area.

The results of remedial investigations indicate that groundwater in the vicinity of Site 3 represents a risk to human health at the upper end of the EPA guideline target risk range under future residential and future industrial exposure scenarios which assume consumption of shallow groundwater at Site 3. Ecological risks at the Site appear to be insignificant.

**B. Site 10**

The 1995 RI concluded that the site represents a minimal impact to the surrounding environment. In some areas, landfill contents are exposed at the surface, posing a physical hazard to future workers at the site.

**II. ARARS AND TBCs**

**A. Site 3**

Since there is no current or future plans for use of the groundwater as a potable water source, New Jersey Groundwater Quality Standards should be considered as the ARAR for the groundwater. OSWER Directive 9355.0-62FS entitled "Application of the CERCLA Municipal Landfill Presumptive Remedy for Military Landfills (April 1996) and OSWER Directive 93550.0-49FS entitled "Presumptive Remedy for CERCLA Municipal Landfill Sites" (September 1993) should be considered as TBCs.

**B. Site 10**

OSWER Directive 9355.0-62FS entitled "Application of the CERCLA Municipal Landfill Presumptive Remedy for Military Landfills (April 1996) and OSWER Directive 93550.0-49FS entitled "Presumptive Remedy for CERCLA Municipal Landfill Sites" (September 1993) should be considered as TBCs.



### **III. REMEDIAL ACTION OBJECTIVES**

#### **A. Site 3**

The remedial action objectives for Site 3 are summarized as follows:

1. Prevent contact with landfill contents which are exposed in several areas of the site.
2. Control migration of site-related contaminants to groundwater (groundwater currently appears to be minimally impacted by landfill contents, if at all).
3. Control groundwater usage until New Jersey Groundwater Quality Standards are achieved.

#### **B. Site 10**

The remedial action objectives for Site 10 are summarized as follows:

1. Prevent contact with landfill contents which are exposed in several areas of the site.

### **IV. PROPOSED ALTERNATIVES**

#### **A. Site 3**

Based on the results of remedial investigations and discussions with the Navy, the following alternatives are proposed for Site 3:

Alternative 1 - No Action

Alternative 2 - Limited Action (Institutional Controls)

- Site Security (Fence)
- Long-Term Monitoring (Install Additional Wells for Compliance Monitoring)
- CEA

Alternative 3 - Presumptive Remedy for Municipal Landfills.

- Site Security (Fence)
- Installation of a Landfill Cap or Cover System
- Long-Term Monitoring (Install additional wells for compliance monitoring)
- CEA

## **B. Site 10**

Based on the results of remedial investigations and discussions with the Navy, the following alternatives are proposed for Site 10:

Alternative 1 - No Action

Alternative 2 - Limited Action (Institutional Controls)

- Site Security (Fence)

Alternative 3 - Presumptive Remedy for Municipal Landfills.

- Site Security (Fence)
- Installation of a Simple Cap or Cover to Limit Contact with Wastes (Consider Bituminous Pavement)